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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,883	02/13/2002	Stephen Raiser	GP-301527	6513
75	590 10/30/2003		EXAM	INER
Cary W. Brooks			KALAFUT. STEPHEN I	
General Motors Corp-Legal Staff			ART UNIT	PAPER NUMBER
Mail Code 482-C23-B21 P O Box 300			1745	TAI EXTONDER
Detroit, MI 48	8265-3000		1743	

DATE MAILED: 10/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
•	10/074,883	RAISER ET AL.
Office Action Summary	Examiner	Art Unit
	Stephen J. Kalafut	1745
The MAILING DATE of this c mmunication ap Period for Reply	ppears on the cover sheet with the	he correspondence address
A SHORTENED STATUTORY PERIOD FOR REP	LY IS SET TO EXPIRE 3 MON	TH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statu - Any reply received by the Office later than three months after the maility earned patent term adjustment. See 37 CFR 1.704(b). Status	I. 1.136(a). In no event, however, may a reply be bely within the statutory minimum of thirty (30 d will apply and will expire SIX (6) MONTHS ute. cause the application to become ABAND	be timely filed) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).
Responsive to communication(s) filed on		
,	 Γhis action is non-final.	
3) Since this application is in condition for allow		s, prosecution as to the merits is
closed in accordance with the practice unde Disposition of Claims		
4) Claim(s) <u>1-26</u> is/are pending in the application	on.	
4a) Of the above claim(s) is/are withdr	awn from consideration.	
5) Claim(s) <u>1-6,8-23,25 and 26</u> is/are allowed.		
6) Claim(s) 7 is/are rejected.		
7) Claim(s) <u>24</u> is/are objected to.		
8) Claim(s) are subject to restriction and	or election requirement.	
Application Papers	•	
9) The specification is objected to by the Examir		
10)☐ The drawing(s) filed on is/are: a)☐ acc		
Applicant may not request that any objection to		
11) The proposed drawing correction filed on		pproved by the Examiner.
If approved, corrected drawings are required in a	• •	
12) The oath or declaration is objected to by the E	Examiner.	
Priority under 35 U.S.C. §§ 119 and 120		10(-) (-) (5)
13) Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.C. § 11	19(a)-(d) or (f).
a)⊠ All b)□ Some * c)□ None of:	ata bassa basa sasabsad	
1. Certified copies of the priority docume		inakina Nia
2. ☐ Certified copies of the priority document		
 3. Copies of the certified copies of the prince application from the International E * See the attached detailed Office action for a list 	Bureau (PCT Rule 17.2(a)).	
14) Acknowledgment is made of a claim for domes	stic priority under 35 U.S.C. § 1	19(e) (to a provisional application).
a) ☐ The translation of the foreign language p 15)☐ Acknowledgment is made of a claim for dome		
Attachment(s)	,	
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Infor	mary (PTO-413) Paper No(s) mal Patent Application (PTO-152)

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Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent for "said electrical measuring circuit". Is this the "measuring circuit" in claim 1?

Claim 24 is objected to because of the following informalities: In line 17 of this claim, "lest" should be "least". Appropriate correction is required.

Claims 1-6, 8-23, 25 and 26 are allowed. The prior art cited below or by applicants does not disclose or teach the present fuel cell system which includes a chassis ground, a liquid coolant circuit grounded thereto, and a circuit for measuring the resistance between one of the fuel cells in a stack thereof and the chassis ground. The term "said resistance measuring circuit" in claim 10 is permitted, since it is clearly referring to the "circuit... for measuring resistance" in claim 1. The references in claims 12 and 15 regarding a "potential difference measuring circuit" are likewise clear although the language is somewhat rearranged.

Claim 7 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action. This claim depends from allowed claim 1. Also, claim 24 would be allowable if the minor informality therein is corrected, being dependent on allowed claim 22.

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The disclosure is objected to because of the following informalities: On page 11, line 21, "earthed" would read better as "grounded". Page 11, line 23 and page 12, line 10 refer to figure 1, but the numerals in this section (0039) appear in figure 2. Appropriate correction is required.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hortop (US 6,582,842) discloses a fuel cell with devices which measure the voltage across the coolant and controls operating in response thereto. Grevstad *et al.* (US 3,969,145) and Shimizu *et al.* (US 5,082,753) disclose fuel cells with coolant pipes with insulating sections. Otsubo *et al.* (Japanese 2000-058,079) disclose a fuel cell system with a subsystem which indicates a grounding accident.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 703-308-0433. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 703-308-2383. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

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